



ent and teacher: Use this cover sheet for mailing or faxing.

**ASSIGNMENT BOOKLET 1A**

MAT2225 Mathematics 24

Module 1: Section 1 Assignment and Section 2 Assignment

**FOR STUDENT USE ONLY**

Date Assignment Submitted:

(If label is missing or incorrect)

Student File Number:

Time Spent on Assignment:

Module Number: \_\_\_\_\_

**FOR OFFICE USE ONLY**

Assigned

Teacher: \_\_\_\_\_

Assignment

Grading: \_\_\_\_\_

Graded by: \_\_\_\_\_

Date Assignment Received:

**Student's Questions  
and Comments****Apply Module Label Here****Name****Address****Postal Code***Please verify that preprinted label is for  
correct course and module.***Teacher's Comments**\_\_\_\_\_  
**Teacher**

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# MATHEMATICS

## 24



## Module 1

### Assignment Booklet 1A



## FOR TEACHER'S USE ONLY

### Summary

	Total Possible Marks	Your Mark
Section 1 Assignment	25	
Section 2 Assignment	25	
	50	

### Teacher's Comments

Mathematics 24

Module 1: Independent Living

Assignment Booklet 1A

Section 1 Assignment and Section 2 Assignment

Learning Technologies Branch

ISBN 0-7741-2558-6

**The Learning Technologies Branch acknowledges with appreciation the Alberta Distance Learning Centre and Pembina Hills Regional Division No. 7 for their review of this Assignment Booklet.**

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	
General Public	
Other	



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**ASSIGNMENT BOOKLET 1A**  
**MATHEMATICS 24: MODULE 1**  
**SECTION 1 ASSIGNMENT AND SECTION 2 ASSIGNMENT**

This Assignment Booklet is worth 50 marks out of the total 100 marks for the assignments in Module 1. The value of each assignment and each question is stated in the left margin.

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25

**Section 1 Assignment: Earnings and Deductions**

**Clearly show how you arrived at your answers by showing your work.**

6

1. Yakov works at an electronics store. Last week he worked 48 hours as a salesman. He was paid \$7.00/h for a regular 40-hour week with time and a half for overtime. He also received commissions on his sales. He received 1.5% on his first \$2000.00 in sales and 2% on sales over \$2000.00. Last week his sales were \$6514.54. What was Yakov's gross income last week?



Turn to Section 1: Lesson 2 in the Module 1 Student Module Booklet.



2. Sarah earns a monthly salary of \$2900.00. Each month she pays \$50.00 in union dues and contributes \$150.00 into an RRSP. Estimate each of the following using the table provided.

Taxable Income (\$)	Federal Tax Rate	Provincial Tax Rate	CPP* Rate	EI** Rate
0 to 32 183.00	16%	10%	4.95%	2.1%
32 183.01 to 64 368.00	22%			
64 368.01 to 104 648.00	26%			
104 648.01 and over	29%			

\*There are no contributions on the first \$3500.00 of income and the maximum yearly contribution is \$1801.80.

\*\*The maximum annual premium is \$819.00.

3

- a. Sarah's annual taxable income

④ **b.** Sarah's monthly federal income tax

② **c.** Sarah's monthly provincial income tax

③ **d.** Sarah's monthly CPP contribution

3

e. Sarah's monthly EI premium

4

f. Sarah's monthly net income



Turn to Section 1: Conclusion in the Module 1 Student Module Booklet.



25

**Section 2 Assignment: Budgets****Clearly show how you arrived at your answers by showing your work.**

1. Jasmine has an annual net income of \$27 000.00.

2

a. What is Jasmine's net monthly income?

2

b. If Jasmine budgeted according to the guidelines on page 28 in the textbook, how much would she spend on each of these categories each month?

2

i. food

ii. health and personal care

2. The Halabis prepared a monthly budget.

**HALABI MONTHLY BUDGET**

Category	Amount (\$)	Percent (%)
Housing	1050.00	
Utilities	250.00	
Transportation	500.00	
Food	450.00	
Health	150.00	
Entertainment	150.00	
Savings	150.00	
Miscellaneous	300.00	

5

- a. Determine the percent for each category. Complete the table.

3

- b. Analyze their budget based on the budget guidelines printed on page 28 in the textbook.

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Turn to Section 2: Lesson 2 in the Module 1 Student Module Booklet.



3. Djon purchased 125 mL of toothpaste for \$1.20 and 300 mL for \$3.24.

4

a. How much did 100 mL cost for each size?

1

b. Which was the better buy?

---



Turn to Section 2: Lesson 3 in the Module 1 Student Module Booklet.

4. The September opening balance of your bank account is \$2342.16. The following transactions occurred during the month:

- Sept 1: preauthorized withdrawal of \$95.92 for car insurance
- Sept 1: interest payment of \$0.32
- Sept 2: deposited paycheque of \$450.00
- Sept 4: withdrew \$45.00 for gas
- Sept 10: paid \$13.00 for lunch using a debit card
- Sept 15: paid \$70.64, by cheque, for clothing
- Sept 15: deposited paycheque of \$450.00
- Sept 21: withdrew \$220.00 for spending money
- Sept 30: transaction fees of \$9.50

2

- a. Determine the total amount of credits.

2

- b. Determine the total amount of debits.



②

- c. Find your bank balance for the end of September.

Submit your completed Assignment Booklet 1A to your teacher to be marked.



Turn to Section 2: Conclusion in the Module 1 Student Module Booklet.





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**ASSIGNMENT BOOKLET 1B**

MAT2225 Mathematics 24

Module 1: Section 3 Assignment and Final Module Assignment

**FOR STUDENT USE ONLY**

Date Assignment Submitted:

\_\_\_\_\_

Time Spent on Assignment:

\_\_\_\_\_

(If label is missing or incorrect)

Student File Number:

\_\_\_\_\_

Module Number: \_\_\_\_\_

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Assigned

Teacher: \_\_\_\_\_

Assignment

Grading: \_\_\_\_\_

Graded by: \_\_\_\_\_

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**Student's Questions  
and Comments**

**Apply Module Label Here**

**Name**

**Address**

**Postal Code**

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**Teacher's Comments**

\_\_\_\_\_  
**Teacher**

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# MATHEMATICS

## 24



## Module 1

### Assignment Booklet 1B

## FOR TEACHER'S USE ONLY

### Summary

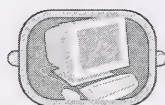
	Total Possible Marks	Your Mark
Section 3 Assignment	25	
Final Module Assignment	25	
	50	

### Teacher's Comments

Mathematics 24  
Module 1: Independent Living  
Assignment Booklet 1B  
Section 3 Assignment and Final Module Assignment  
Learning Technologies Branch  
ISBN 0-7741-2559-4

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**SECTION 3 ASSIGNMENT AND FINAL MODULE ASSIGNMENT**

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25

**Section 3 Assignment: Interest**

**Clearly show how you arrived at your answers by showing your work.**

5

1. Winona Badger has just purchased a \$5000.00 bond that bears 5.5% simple interest annually. What interest will this bond earn over 36 months?

5

2. Praskovia wants to obtain a short-term loan for \$1500.00 and pay it back in 3 months. She does not wish to be charged more than \$50.00 in simple interest. What annual interest rate must she shop for from lending institutions? Round your answer to the nearest percent.



Turn to Section 3: Lesson 2 in the Module 1 Student Module Booklet.

5

3. Charlene has \$20 000.00 to invest. She is considering depositing her money into an account at a rate of 8% compounded quarterly. If she leaves her money in the account how much interest will she earn over 25 years? Use the formulas  $A = P(1+i)^n$  and  $I = A - P$ .



4. Darcy is considering investing \$3500.00 in either one of two accounts.

- Account A bears 4.0% compounded annually.
- Account B bears 3.75% interest compounded monthly.

Use the compound interest spreadsheet you prepared in this lesson and attach copies to this Assignment Booklet.

4

a. How much money would Darcy have in Account A after 3 years?

---

4

b. How much money would Darcy have in Account B after 3 years?

---

2

c. Which is the better investment and by how much?



Turn to Section 3: Conclusion in the Module 1 Student Module Booklet.

25

**Final Module Assignment****Clearly show how you arrived at your answers by showing your work.**

1. Peter is preparing his annual income tax return. His taxable income is \$75 614.00. Use this taxation table to estimate Peter's federal and provincial income tax.

<b>Taxable Income (\$)</b>	<b>Federal Income Tax Rate (%)</b>	<b>Alberta Income Tax Rate (%)</b>
0 to 32 183.00	16%	10%
32 183.01 to 64 368.00	22%	10%
64 368.01 to 104 648.00	26%	10%
104 648.01 and over	29%	10%

5

- a. Peter's federal income tax

2

- b. Peter's provincial income tax

2. The Parson family has prepared a budget.

**PARSON FAMILY BUDGET**

Category	Percent
Housing	33%
Clothing	17%
Food	15%
Car	15%
Utilities	10%
Miscellaneous	10%

- ⑥ a. Use spreadsheet software to prepare a circle graph of their budget. Attach a copy of your circle graph to the Assignment Booklet.
- ③ b. If their monthly net income is \$3200.00, how much would they spend on food?
- ④ 3. John wishes to exchange 500 Canadian dollars for American currency. He read in the paper that the exchange rate is  $\text{US\$1.00} = \text{Can\$1.3569}$ . How much should he receive in American currency?



5

4. Calculate the interest earned on \$80 000.00 over 40 years at 6%/a compounded monthly. (**Hint:**  $A = (1 + i)^n$  and  $I = A - P$  are useful formulas here.)





